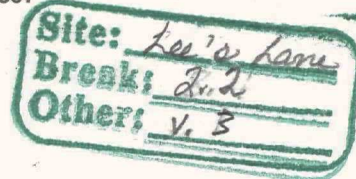




Mail To: P.O. Box 740011
Louisville, Kentucky 40201



April 20, 1993

Ms. Liza I. Montalvo
Remedial Project Manager
Kentucky/Tennessee Section
U. S. EPA
Region IV
345 Courtland Street, N. E.
Atlanta, GA 30365

**Re: Results of Air Quality Monitoring - FY 93 Third Quarter
(FY93-3Q), Lees' Lane Superfund Site, Jefferson County,
Kentucky Administrative Order on Consent, U. S. EPA Docket No.
No. 93-32-C**

Dear Ms. Montalvo:

In accordance with Paragraph 11, under Reporting Requirement, of the subject Consent Order and Attachment I, Operation and Maintenance Plan for Post-Removal Site Control at the Lees' Lane Landfill Site, Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following letter of April 5, 1993, analyses and sampling location map prepared by Radian Corporation, P. O. Box 13000, Research Triangle Park, North Carolina 27709, as received by MSD on April 6, 1993:

1. Radian Corporation letter, dated April 5, 1993, 2 pages.
2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.
3. Table 1, T0-14 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: 02/23/93, 1 page.
4. Table 2, On-Site Meteorological Data, February 23, 1993, 1 page.
5. Radian Corporation, Table 3, T0-14 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill Sampling date: 02/23/93, 1 page.

DOCUMENT CONTROL NUMBER 4400-83-AGVY



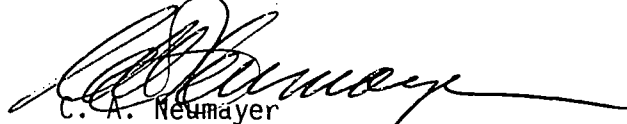
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Results of Air Quality Monitoring - FY 93, Third Quarter (FY93-3Q),
Lees' Lane Superfund Site, Jefferson County, Kentucky,
Administrative Order on Consent, USEPA Docket No. 91-32-C
April 20, 1993
Page 2

Please advise if you have any questions concerning these sampling
arrangements.

Very truly yours,


C. A. Neumayer
Director of Operations

CAN/dc
CAN30.6B

Enclosures

cc: KNREPC, Attn: Mr. Rick Hogan
Division of Waste Management
G. R. Garner, Executive Director
File WD-2 (Lees Lane M&M Quarterly)

RADIAN
CORPORATION

April 5, 1993

Mr. Dan Sammons
Chief Chemist
Louisville Metropolitan Sewer District
4522 Algonquin Parkway
Louisville, Kentucky 40211

Progress Center
3200 E. Chapel Hill Rd./Nelson Hwy.
P.O. Box 13000
Research Triangle Park, N.C. 27709
(919) 481-0212

2-11/6/93 18

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Dear Dan,

Enclosed is the summary analytical report for the ambient and gas monitoring well samples collected at the Lee's Lane Landfill site on February 23, 1993.

A revised map of the site has been labelled with the sample collection locations for your reference in Figure 1. Table 1 is a tabular summary for the ambient sample with the primary analytes required for submission to EPA. The value for methylene chloride is not reported (NR) at this time due to a chromatographic interference. We are attempting to resolve this difficulty on a separate analytical system.

The monitoring sites for this quarterly collection were chosen based on a combination of prevailing on-site meteorology and available sites in the adjacent residential neighborhood. The prevailing wind on the monitoring day was Southwest to West at 1-6 miles per hour (mph). Hourly readings of wind speed and direction were recorded by LMSD personnel. The meteorological data is summarized in Table 2. The ambient samples were collected 3-5 feet above ground level. The ambient samples collected were integrated over a 7-8 hour collection period in Summa canisters. The TO-14 methodology with MD/GC was employed for the analysis. The methane analysis was performed by GC/FID on a separate analytical column prior to the TO-14 analysis.

Table 3 is tabular summary of the gas well samples with the primary analytes required for submission to EPA. Each set of gas monitoring wells was screened with field monitors (OVA-128, combustible gas meter, and PhotoTip). The values for methane were recorded by the OVA-128. The OVA values were used to select the wellhead (S or D) for collection of the canister sample.

The sample analysis was done by Gas Chromatography/Multidetector (GC/MD) at Radian's Perimeter Park Laboratory. Sample canisters and flow controllers were cleaned and blanked by TO-12 for total hydrocarbons prior to field deployment. Samples were handled with standard laboratory chain of custody procedures.

Mr. Dan Sammons


April 5, 1993

Page 2

Several canisters did not have fully integrated field vacuum. This was particularly apparent with the duplicate ambient canister (AS-A2). These canisters therefore required additional pressurization (dilution) for the methane laboratory analysis. This procedural step may have increased the bias of the reported methane value for the duplicate ambient sample (AS-A2) due to poor chromatographic separation of the air and methane peaks. Future methane laboratory analysis will be performed on a different column in an attempt to minimize the potential positive bias.

Radian appreciates the opportunity to assist your staff with this project. Please advise me at (919)-481-0212 if you have any questions.

Sincerely,



Robert F. Jongleux
Project Director

RFJ/pj

Attachments

cc: G.A. Holliden, Radian/LOU



Figure 1. Lees Lane Landfill Sampling Locations

Not to scale.

TABLE 1

TO-14 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE
LEES'S LANE LANDFILL
LOUISVILLE, KENTUCKY

SAMPLING DATE: 02/23/93

Sample ID	AS-U1	AS-A1	AS-A2	AS-R1	AS-R2	AS-R3
Canister ID	A127721	A141762	A127727	A127729	A127733	A127732
Location	Upwind	Downwind	Downwind	Residential	Residential	Residential
Dilution Factor	1.3588	1.0928	1.5862	2.2849	1.1544	1
Compound (conc. in ppbv)						
Benzene	0.23	0.19	0.21	0.24	0.36	0.34
Toluene	0.15	0.14	0.15	0.17	1.36	0.80
Xylene (total)	0.09	0.12	0.11	0.12	0.61	0.38
Methylene Chloride b	0.53	<0.02	1.96	0.65	3.49	0.17
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Methane (ppm)	0.7	0.03	11.4	ND	1.8	2.7

ND - Not Detected

b - Based on Confirmation Analysis

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TABLE 2
ON-SITE METEOROLOGICAL DATA
FEBRUARY 23, 1993

TIME	BAROMETRIC PRESSURE (in Hg)	HUMIDITY (%)	WIND DIRECTION	WIND SPEED (mph)	OBSERVATIONS
800			W	3	Mostly Cloudy
830		46	W	2	Mostly Cloudy
900			SW	2	Mostly Cloudy
930		44	SW	2	Mostly Cloudy
1000			W	6	Mostly Cloudy
1030	30.26		SW	5	Mostly Cloudy
1100			SW	3	Mostly Cloudy
1130			SW	4	Mostly Cloudy
1200		-	SW	4	Mostly Cloudy
1230	30.16	-	SW	5	Mostly Cloudy
1300		-	SW	6	Mostly Cloudy
1330		46	SW	5	Mostly Cloudy
1400		45	SW	3	Mostly Cloudy
1430			W	1	Mostly Cloudy
1500			W	3	Mostly Cloudy
1530			W	5	Mostly Cloudy
1600			SW	3	Mostly Cloudy

** Compiled by LMSD personnel at Lee's Lane Landfill Site **

TABLE 3

TO-14 DATA SUMMARY FOR GAS MONITORING
WELL SAMPLES AT THE LEE'S LANE LANDFILL
LOUISVILLE, KENTUCKY

SAMPLING DATE: 02/23/93

Sample ID	AS-G1D	AS-G2S	AS-G3D	AS-G4S	AS-G5S	AS-G5Du	FBL
Canister ID	A141767	A127724	A141752	A141754	A141745	A141750	A127734
Dilution Factor	1	1.089	1	1.1705	1.2804	1.2997	1
Compound (conc. in ppbv)							
Benzene	0.24	0.05	0.26	0.07	0.05	0.24	0.05
Toluene	0.14	0.03	0.16	0.04	0.04	0.20	0.15
Xylene (total)	0.13	0.06	0.11	0.03	0.03	0.22	0.02
Methylene Chloride b	0.68	0.29	0.32	0.60	1.10	1.18	1.00
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND
Methane (ppm)	4.8	3.6	4.3	7.4	5	3.3	ND

ND - Not Detected

b - Based on Confirmation Analysis

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